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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/652,897

08/30/2003

Truman F. Kellie

SAM0019/US

9568

33072

7590

02/07/2005

KAGAN BINDER, PLLC
SUITE 200, MAPLE ISLAND BUILDING
221 MAIN STREET NORTH
STILLWATER, MN 55082

EXAMINER

ROYER, WILLIAM J

ART UNIT

PAPER NUMBER

2852

DATE MAILED: 02/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/652,897

Applicant(s)

KELLIE ET AL.

Examiner

William J. Royer

Art Unit

2852

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-22 is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 August 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12122003; 12132003.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

This application is in condition for allowance except for the following formal matters:

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the cooling element of Claim 17 for cooling at least one of the rollers of the first and second nip area must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

The drawings are objected to because of the following informalities:

Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g).

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for

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consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The disclosure is objected to because of the following informalities:

On page 1, line 8, after "relates" insert --- to ---.

On page 2, line 3, change "receptor" to --- photoreceptor ---.

On page 5, line 23, change "first and" to --- prefusing roller, ---.

On page 7, line 17, change "The" to --- The second roller or ---.

On page 7, line 19, after "contact nip" insert --- (nip area) ---.

On page 8, line 20, after "roller" insert --- 12 ---.

On page 8, lines 21 and 22, after "area" insert --- 32 ---.

On page 8, line 24, after "substrate" insert --- 24 ---.

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On page 9, line 17, change "a nip" to --- the nip area ---.

On page 9, line 20, after "nip" insert --- area ---.

On page 10, line 23, change "first fusing station" to --- prefusing roller ---.

On page 12, line 5, after "nip" insert --- area ---.

On page 12, line 22, delete --- , etc. ---.

On page 12, line 27, change "rolls" to --- rollers ---.

On page 13, lines 14 and 17, after "substrate" insert --- 24 ---.

On page 13, lines 21 and 23, after "rollers" insert --- 12, 16 ---.

On page 13, line 29, after "system" insert --- 10 ---.

On page 13, line 30, after "nip" insert --- area ---.

On page 14, line 2, change "first nip" to --- nip area ---.

On page 14, line 5, after "substrate" insert --- 24 ---.

On page 14, line 10, after "nip" insert --- area ---.

On page 14, line 11, after "fixation nip" insert --- (nip area) ---.

On page 15, lines 1 and 2, change "nip" to --- nip area ---.

On page 15, lines 3 and 19, after "substrate" insert --- 24 ---.

On page 15, line 13, delete --- fusing ---.

On page 15, lines 15 and 23, change "fixation" to --- fusing ---.

On page 15, line 23, change "rollers" to --- roller ---.

On page 15, line 26, change "a nip" to --- the nip area ---.

On page 16, line 9, change "fixation" to --- fusing ---.

On page 16, line 12, after "nip" insert --- area ---.

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On page 16, lines 21 and 22, change "nips" to --- nip areas ---.

On page 17, line 10, change "24" to --- 203 ---.

On page 17, lines 11 and 14, after each occurrence of "substrate" insert -- 203 --.

On page 17, line 15, after "guides" insert --- 201 ---.

On page 18, lines 24 and 26, change "fixation" to --- fusing ---.

On page 22, line 9, change "fixation" to --- fusing ---.

Appropriate correction is required.

Claim Objections

Claims 9 and 17 are objected to because of the following informalities:

Claim 9, line 2, change "a layer" to --- an outer layer --- in order to provide proper antecedent basis for the "outer layer" referred to in Claim 10 which is dependent upon Claim 9.

Claim 17, line 2, change "areas.." to --- areas. ---.

Appropriate correction is required.

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

Allowable Subject Matter

Claims 1-22 are allowable over the prior art of record because the prior art of record fails to teach or suggest a fusing apparatus or a method of fixing images made from a liquid toner onto a substrate with a fusing apparatus where the fusing apparatus includes: a prefusing roller, a backup roller positioned to create a first nip area between the prefusing roller and the backup roller, and a fusing roller positioned to create a second nip area between the fusing roller and the backup roller, wherein at least one of the prefusing roller and the backup roller is heated to a temperature that provides a prefusing temperature within the first nip area, and wherein at least one of the fusing roller and the backup roller is heated a temperature that provides a fusing temperature in the second nip area that is different than the prefusing temperature of the first nip area.

Relevant Prior Art

The following prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kurotori et al disclose a wet-type image fixing unit including first and second image-fixing sections for use with copy paper and transparencies.

Farnand et al disclose a method and apparatus for preheating and pressure-fixing a toner image.

Moser discloses a droop compensated fuser having a preheater structure.

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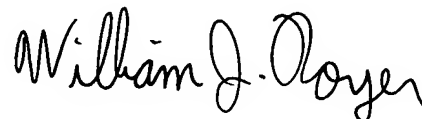
Pang et al disclose an image fusing unit for a liquid electrophotographic printer that includes a drying portion and a fusing portion.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William J. Royer whose telephone number is (571) 272-2140. The examiner can normally be reached on Monday-Thursday and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Arthur T. Grimley can be reached on (571) 272-2136. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



William J. Royer
Primary Examiner
Art Unit 2852

wjr
February 4, 2005